

### Recommended Fluids and Lubricants

Ensure your machine operates at top efficiency by using clean fluids and lubricants only.

- Use clean containers to handle all fluids and lubricants.
- Store fluids and lubricants in an area protected from dust, moisture, and other contaminants.

Lubricant	Specification	Description	Use	Capacities
Grease	SAE multi-purpose	High temperature extreme pressure (EP) performance grease with 1% max molybdenum disulphide (NLGI Grade 2) lithium base	As required unless otherwise specified	—
		High temperature extreme pressure (EP) performance grease with 10% max molybdenum disulphide (NLGI Grade 2) lithium base	Driveline slip-joints	—
Gear Lubricant	SAE 85W-140	API service class GL-5	Knife drive box	1.5 liters (1.3 quarts)
			Main gearbox	2.75 liters (2.9 quarts)
			Completion gearbox	2.25 liters (2.4 quarts)
Hydraulic Oil	Single grade trans-hydraulic oil Viscosity at 60.1 cST @ 40°C Viscosity at 9.5 cST @ 100°C  Recommended brands: • Petro-Canada Duratran • John Deere Hy-Gard J20C • Case Hy-Tran Ultrraction • AGCO Power Fluid 821 XL	Lubricant trans / hydraulic oil	Header drive systems reservoir	95 liters (25.1 US gallons)
Chain Oil	Viscosity of 100–150 sCt at 40°C (104°F) or mineral oil SAE 20W-	Formulated for wear protection and resistance to foaming.	Reel drive chain	—

### Break-In Inspections

To help avoid major component service or replacement, perform break-in inspections on your machine for the first 50 hours of operation. Refer to your operator's manual for complete break-in inspection and adjustment procedures.

Interval	Item
First 5 Minutes	Check hydraulic oil level in reservoir (check after first run-up and after the hydraulic hoses have filled with oil).
5 Hours	Check for loose hardware and tighten to required torque.
10 Hours	Check auger drive chain tension.
	Check knife drive box mounting bolts.
	Grease feed draper drive roller and idler roller bearings.
50 Hours	Change float module gearbox oil.
	Change float module hydraulic oil filter.
	Change knife drive box lubricant.
	Check gearbox chain tension.
	Lubricate reel drive chain.

### Ongoing Maintenance Intervals

Refer to the operator's manual for a comprehensive maintenance schedule and record. Log hours of operation, use the maintenance record, and keep copies of your maintenance records.

Following the maintenance schedule will increase your machine's life.

### SETTING HEADER FLOAT AND WING BALANCE

Follow these five steps in order to set the header float and wing balance:

#### NOTE:

Read and understand the header float section of your operator's manual before setting header float.

#### Step 1: Preadjustments

- Park the combine on a level surface, and ensure the combine feeder house is level. Use the bubble level on the float module.
- Adjust the header so the cutterbar is 250 mm (10 in.) (A) off the ground.
- Set the header angle hydraulic cylinder to D on indicator (B).
- Set the reel fore-aft to 6 on reel arm fore-aft indicator (C).
- Lower the reel completely, shut down the combine, and remove the key from the combine ignition.

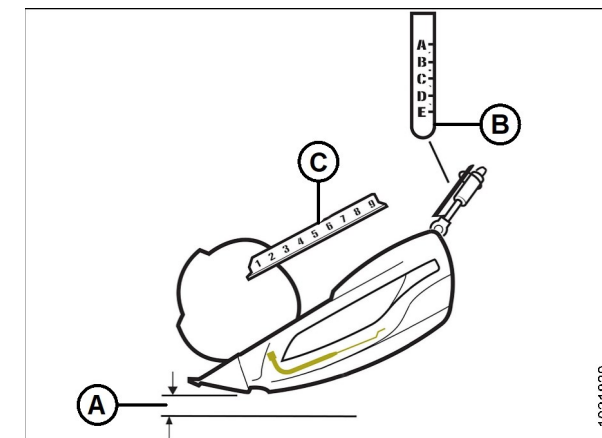


Figure 1: Header – Side View

- Remove linkage cover (A).
- Place both left and right wing lock spring handles (B) in the locked (upper) position. You should hear the locks engage. If not, move the wings up and down, so that the locks engage.

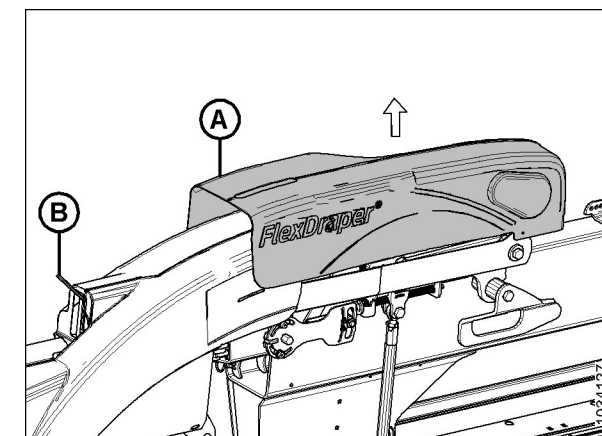


Figure 2: Wing Lock Spring Handle in Locked Position – Left Side Shown

- Place both the left and right header float locks in unlocked (lowered) position (A).
- Set the stabilizer/transport wheels or contour wheels (if equipped) to the upper most position.

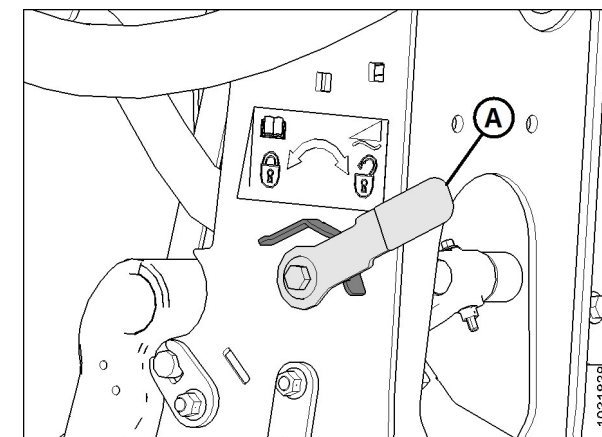


Figure 3: Float Unlocked – Left Side Shown

Subject to change without notice

### Step 2: Checking Header Float

- On the left side of the header, lift float setting lever (A) by hand to remove slack.
- Fully engage the flat end of multi-tool (B) on the float setting lever. The multi-tool should be angled toward the front of the float module.
- Pull multi-tool (B) toward the back of the float module until lever (A) is locked in place and will not return to its original position.
- Move the header up and down by hand several times to reduce the effect of friction.
- Remove the multi-tool and repeat on the opposite side.

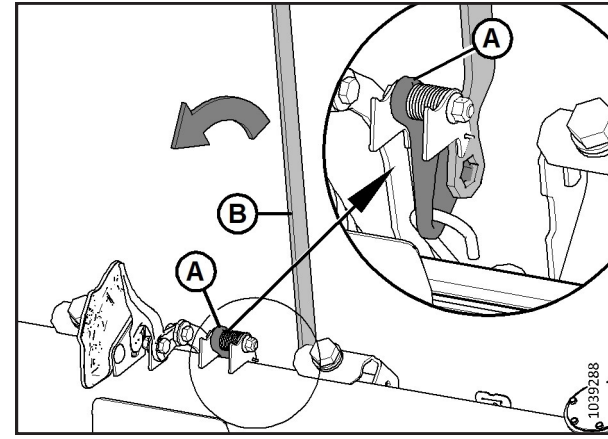


Figure 4: Checking Float – Left Side Shown, View from Rear

**WARNING**  
Once the float setting lever has been set, remove the multi-tool from the lever IMMEDIATELY. If the lever falls to its starting position while the multi-tool is engaged with it, injury can occur.

- On the left side of the float module, inspect smaller float setting indicator (FSI) (A). Arm (B) on the FSI should point to the number 2.
  - If the FSI points to a value higher than 2, the header is too heavy.
  - If the FSI points to a value lower than 2, the header is too light.

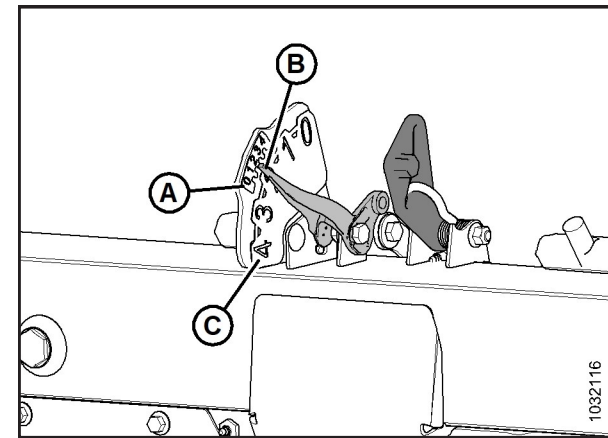


Figure 5: Checking Float – Left Side Shown, View from Rear

**NOTE:** The larger numbers (C) indicate the float height while operating the header in the field.

**NOTE:** If necessary, adjust the float values to suit the crop and field conditions. For more information, refer to the header operator's manual.

### Step 3: Setting Header Float

- Loosen bolts (C), and rotate spring locks (B).
  - To decrease header weight, turn both adjustment bolts (A) equally clockwise (decreasing the value on the FSI).
  - To increase header weight, turn both adjustment bolts (A) equally counterclockwise (increasing the value on the FSI).

**NOTE:** Ensure the FSI values are equal on both sides.

- After adjustment, lift the end of the header by hand and recheck the FSI reading.

**NOTE:** If an adequate header float cannot be achieved using all the available adjustments, an optional heavy duty spring is available. See your MacDon Dealer or refer to the parts catalog for ordering information.

- Once the float adjustment is complete, lock adjustment bolts (A) with spring locks (B). Ensure that bolt heads (A) are engaged and tighten bolts (C) to secure the spring locks.

- Use the combine to fully lower the header. The left and right float setting levers will return to their original positions.

**WARNING**  
Do NOT use the multi-tool to release the float setting lever. Using the multi-tool to release the float setting lever can result in injury.

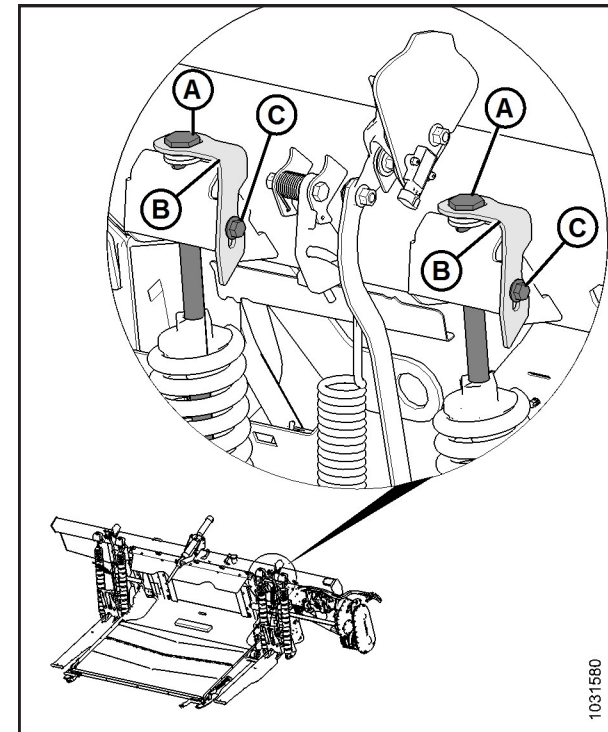


Figure 6: Float Adjustment Bolts – Left Side Shown

### Step 4: Checking Wing Balance

**NOTE:** Before proceeding to check and adjust the wing balance, ensure the header float is set. Refer to Step 3: Setting Header Float for instructions.

- Attach flex checker cable (A) to flex checker cable lock (B).

**NOTE:** Images shown are from the left side.

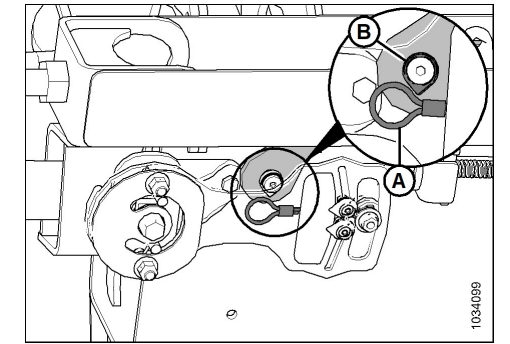


Figure 7: Flex Checker Cable

- On the side that you are adjusting, move spring handle (A) to the lower (UNLOCK) position. Keep the opposite wing locked. You should hear the lock disengage. If not, use multi-tool (B) to rotate the mechanism so that the lock disengages.

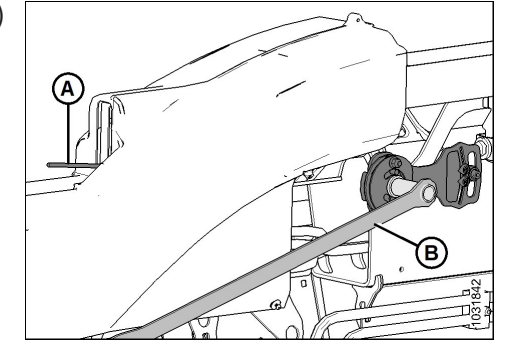


Figure 8: Wing Balance Linkage

- On both sides of the float module, place the header float locks (shown in Figure 3) in the locked position.

- On the flex checker plate, pinch indicators (A) and (B) together with your fingers.
- Use multi-tool (C) to rotate the flex checker plate up until the pin reaches the end of the slot. The lower indicator (B) will move down to give the first reading.
- Use multi-tool (C) to rotate the flex checker plate down until the pin reaches the end of the slot. The upper indicator (A) will move up to give the second reading.
- Refer to Figure 10 and interpret the indicator positions as follows:
  - Condition A – the wing is too light; make the wing heavier.
  - Condition B – the wing is too heavy; make the wing lighter.

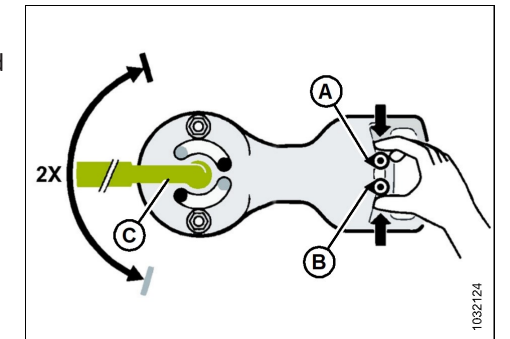


Figure 9: Wing Balance Adjustment

### Step 5: Adjusting Wing Balance

- If the wing is too light (Condition A), make it heavier by turning adjuster bolt (D) to move clevis (E) in direction (F).
- If the wing is too heavy (Condition B), make it lighter by turning adjuster bolt (D) to move clevis (E) in direction (G).
- Recheck the wing balance. Adjust as required until the wing is balanced (Condition C).
- Move the spring handle to the upper (LOCK) position.
- If the lock does not engage, move the wing up and down with the multi-tool until it locks.
- Detach the flex checker cable from the flex checker lock.
- Repeat on the other side.
- Return the multi-tool to its storage location, and reinstall the linkage cover.

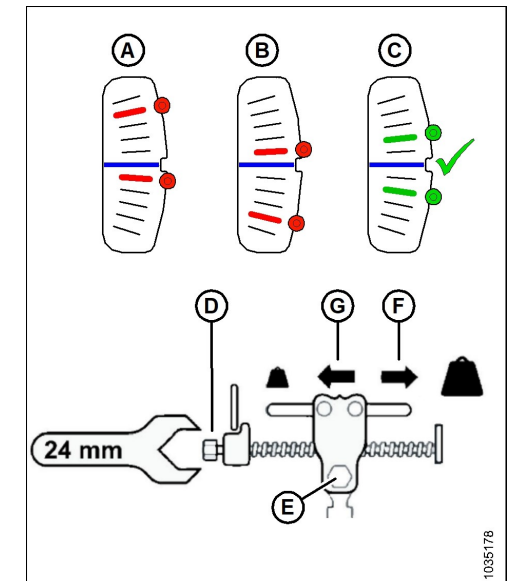


Figure 10: Wing Balance Adjustment